

# **# 1673/IS QUALITY OF LIFE (QOL) AN APPROPRIATE OUTCOME MEASURE FOR THE EVALUATION OF EXERCISE PROGRAMS FOR CHRONICALLY ILL INDIVIDUALS?**

Anke Hanssen-Doose & Klaus Schuele, Institute of Rehabilitation & Sport for the Disabled, German Sport University Cologne, Cologne, Germany

The interdependency of Quality of Life (QOL), this being understood as a multidimensional construct, and Physical Activity (containing physical, psychological and social components) has not yet been proven. Although there is no clear relationship between Quality of Life (QOL) and Physical Activity levels, QOL-measurements are widely used for the evaluation of exercise programs for people with chronic diseases. Some studies with healthy individuals show no improvement of QOL that could be attributed to exercise. The Objectives of this paper are, firstly, to give a systematic overview over existing exercise programs evaluated with generic QOL-instruments on the basis of a literature review and, secondly, to discuss conceptual issues pertaining to the suitability of QOL-measurement for the evaluation of exercise programs. Methods: The Literature review was carried out by using special keywords. The study designs were controlled studies. The studies were analysed within a framework of different parameters, such as kinds of chronic diseases, sample sizes, instruments, exercise programs, QOL results. Results: Twenty three relevant exercise programs for chronically ill individuals were extracted. Twenty one studies (91%), however, showed a significant increase of QOL after chronically ill individuals had participated in corresponding exercise programs. The following factors influenced the suitability and the accuracy of generic QOL-measurement for the evaluation of exercise programs: (1) Evaluation of disease stages and symptoms in order to choose sensitive QOL-instruments which help avoiding ceiling effects, (2) evaluation of activity levels (everyday life and sports) at baseline and during the studies in order to control the impact of the total physical activity of the study population. Conclusions: The results suggest that generic questionnaires are indeed suitable outcome criteria to measure the effectiveness of special exercise programs because due to their multidimensional structure they best reflect the holistic nature of the effects of exercise programs.

# **# 1397/OUTCOMES AND WELL-BEING IN TYPE 2 DIABETIC PATIENTS**

Jose L. Pais-Ribeiro & Clara Garcia, Psicologia, Universidade do Porto, Porto, Portugal

Well-Being is considered an important outcome for diabetic patients and other chronic diseases. The aim of the present study is to identify the relationships between well-being and characteristics of type 2 diabetes. The participants in the study were 389 outpatients, with a mean age of  $M = 60.93$  years, 35% female, 85% married, with type 2 diabetes, with no less than 18 years of age; literate; no less than 6 months after the first contact with the medical doctor; with no other severe disease; and with no mental disease. Patients completed Bradley's 12 item Well Being questions (W-BQ12) developed for diabetic patients. Principal components analysis of the Portuguese W-BQ12 identified two factors, Positive Well-Being and Negative Well-Being (Cronbach  $\alpha$  0.80 for the seven items of the NWB, and 0.70 for

the five items of the PWB (correlation between the two scales  $r = 0.45$ , higher score means worst results for both scales). Evaluation also included clinical outcomes measures – Medical Perception of Patient Adherence, Patient Self-Perception Adherence, Glycated Hemoglobin (HbA1c), and other disease-related data – the duration of the disease, the number of complications due to disease (retinopathy, nephropathy and/or neuropathy), severity of the disease evaluated by a medical doctor, and BMI. Results show statistically significant correlations between NW-BQ and complications due to disease ( $r = 0.22$ ) severity of disease ( $r = 0.19$ ) (both  $p < 0.0001$ ), and BMI ( $r = 0.10$ ,  $p < 0.05$ ), and between PW-BQ and complications due to disease ( $r = 0.23$ ) and severity of disease ( $r = 0.21$ ) (both  $p < 0.0001$ ). No relationship was found between WB and adherence indicators. It seems that WB is not an important issue with regard to adherence for the Portuguese population. WB seems to be more closely related with the consequences of disease

# **# 1613/QUALITY OF LIFE AND BODY IMAGE OF PATIENTS WITH ACROMEGALY**

Rueya D. Kocalevent & Matthias Rose, Department of Psychosomatic Medicine; Charité M. Ventz, Department of Endocrinology; Herbert Fliege, Janine Becker, Otto B. Walter & Burghard F. Klapp, Department of Psychosomatic Medicine, Humboldt University, Berlin, Germany

Little empirical research has been conducted regarding the quality of life and body image of patients with acromegaly. The present study examines what aspects of these two constructs have changed as a result of the illness. Ninety one patients were examined (age  $56 \pm 12$  yrs., 42.9% men) using the WHO Quality of Life questionnaire (WHOQOL-Bref) and the Frankfurter Body Concept Scales (FKKS). Two representative group samples ( $n = 2073/1344$ ) served as controls. The patients IGF-1 and STH values were also assessed. The quality of life of patients was significantly reduced in psychological ( $64 \pm 19$  vs.  $77 \pm 18$ ), physiological ( $65 \pm 18$  vs.  $74 \pm 19$ ) and social aspects ( $66 \pm 18$  vs.  $72 \pm 19$ ) (each  $p < 0.001$ ) when compared to the normal population. The regression analysis showed ( $R^2$  corr = 0.32,  $p < 0.001$ ) that the IGF-1 values are associated with physical well-being (beta = -0.21). No differences could be found between the forms of therapy administered, gender, or age. The patients assessed their social/life circumstances more positively than the general population ( $74 \pm 12$  vs.  $70 \pm 14$   $p < 0.05$ ). They also have a significantly altered body image in all aspects in comparison to the general population (each  $p < 0.001$ ). Not only do they report less acceptance of their own bodies ( $20.9 \pm 5.6$  vs.  $24.5 \pm 5.1$ ), but also considerable restrictions with respect to their sexuality ( $18.8 \pm 5.6$  vs.  $25.3 \pm 4.7$ ) and fears of exuding an unpleasant body odour ( $11.1 \pm 3.2$  vs.  $17.4 \pm 3.0$ ). Other's acceptance of their bodies was, however, assessed more positively than in the general population ( $14.8 \pm 3.3$  vs.  $14.2 \pm 3.2$ ,  $p < 0.05$ ). All aspects of body image can be seen to be closely connected to quality of life ( $R^2$  corr = 0.32–0.38,  $p < 0.001$ ). Patients can be shown to have a considerably reduced quality of life. This is connected not only with the therapeutic regulation of the IGF-1 values, but is essentially co-dependent on the extent of alteration of the subjective body image.